

CLAIMS

1. The process for forming a filtration module having a feed inlet port, at least one permeate port and a retentate port which comprises:

forming a stack of a plurality of fluid permeable spacer layers and a plurality of membrane filter layers wherein said spacer layers are positioned alternately with said filter layers in a vertical direction,

providing thermoplastic sections secured to said spacer layers in a configuration such that when said sections are melted, sealing of alternately positioned spacer layers in said feed inlet port, said at least one permeate port and said retentate port are effected such that liquid in said at least one permeate port is not admixed with liquid in said feed port and in said retentate port, the thickness of said thermoplastic sections being between about 100% and about 125% of the thickness of one of said spacer layers.

2. The process of Claim 1 wherein said thickness of said thermoplastic sections is between about 110% and about 120% of the thickness of one of said spacer layers.

3. In a filtration module including a multiple of filtration components comprising a filtrate screen, a feed screen and two membrane layers, each having a feed inlet, a filtrate outlet and, optionally a retentate outlet which is sealed to prevent admixture of filtrate with either feed or retentate and wherein feed must pass through a membrane layer prior to entering a filtrate screen, the improvement which comprises providing a thermoplastic polymeric sealing composition about the periphery of each filtrate screen and optionally about the periphery of each feed screen wherein the thickness of said thermoplastic polymers sealing composition is between about 100% and about 125% of a filtrate screen or a feed screen.

4. The module of Claim 3 wherein each of said feed screens include a compressible polymeric composition about the periphery of said feed screen and wherein said compressible polymeric composition is between about 100% and about 125% the thickness of said feed screen.